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SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202			EXAMINER DANG, HUNG Q	
			ART UNIT 2612	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/634,311

Applicant(s)

CHAN ET AL.

Examiner

Hung Q. Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-102 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-40, 42-82 and 84-97 is/are rejected.
- 7) ☒ Claim(s) 41, 83 and 98-102 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) ✓
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 39 is objected to because of the following informalities: "a indicator" should be changed to "an indicator". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10, 14, 15, 25, 38-40, 43, 52, 59, 65-69, 71, 75, 81, 82, 88, 89 and 95 are rejected under 35 U.S.C. 102(b) as being anticipated by Carrender et al. U.S. Patent 6,061,614.

Regarding claims 10, 38, 43, 75 and 81, Carrender et al. teaches an interrogation (Figure 1, unit 14) apparatus for communicating with at least one transponder (Figure 1, unit 18), comprising:

at least one antenna portion (Figure 1, unit 12 or 13) operable to transmit an interrogation signal to the transponder and to receive a data signal from the transponder;

a processing portion (Figure 1, unit 24) operably interconnected to said at least one antenna portion operable to receive the data signal, determine the presence of

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body characteristic data within the data signal, and when the presence of body characteristic information is detected, decode the data signal to obtain at least said body characteristic information (**note:** the examiner interprets the claimed “determine the presence of the body characteristic” as when the processing portion decoding the data signal because, inherently, in order to decode the data signal to obtain the body characteristic information, the presence of body characteristic data must be, somehow, detected; also, column 6 lines 22-29 indicates that the “parameter ID” identifies the particular format and type of data provided); and

an output portion operable to output, when the presence of body characteristic information is detected, said body characteristic information (Figure 1, ...output to a host computer 30 for processing).

Regarding claims 14 and 15, since the transponder disclosed by Carrender et al. indicates that the data format includes a “parameter ID” identifying the particular format and type of data provided within the data signal, which implies that the processing portion of the interrogator must be able to determine a data format of said data signal.

Regarding claims 25, 40 and 82, Carrender et al. also teaches a data signal having at least a header and a data portion, wherein the processing portion is operable to receive the header and determine from the header whether the data portion includes a body characteristic data (column 6, lines 22-29; the examiner interprets the header to include the “device ID”, the “sub-system ID” and the “parameter ID”).

Regarding claims 39 and 52, Carrender et al. also teaches identifying an indicator within said information signal, and determines the presence of body characteristic information based on the indicator (column 6, lines 22-29).

Claims 59, 68, 69, 71, 88 and 89 are rejected for the same reasons as the rejection of claim 10.

Regarding claim 65, Carrender et al. also teaches formatting a first telegram having a first data portion, wherein said first data portion includes identification information associated with said transponder (column 6, lines 17-33; the identification information in this case is the device ID).

Regarding claims 66 and 67, Carrender et al. also teaches determining the characteristic at said transponder; formatting a second telegram having an indicator and a second data portion, wherein the second data portion includes said characteristic information (column 6, lines 17-33; the indicator in this case is the parameter ID; of course, a data portion is also provided).

Claim 95 is rejected for the same reasons as the rejection of claim 10.

4. Claims 10-13, 20, 21, 27, 29, 31, 35, 36, 38, 43, 44, 48, 54-57, 63-65, 73-75, 81, 84, 87, 88 and 94 are rejected under 35 U.S.C. 102(b) as being anticipated by Urbas et al. U.S. Patent 6,054,935.

Regarding claims 10, 11 and 38, Urbas et al. teaches an interrogation (Figure 1, unit 100; and paragraph 3 lines 22-35) apparatus for communicating with at least one transponder (Figure 2, unit 200; and paragraph 3 lines 22-35), comprising:

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at least one antenna portion (Figure 3, unit 3) operable to transmit an interrogation signal to the transponder and to receive (Figure 1, unit 12 indicates receiving signal) a data signal from the transponder;

a processing portion (Figure 1, unit 16) operably interconnected to said at least one antenna portion operable to receive the data signal, determine the presence of body characteristic data within the data signal, and when the presence of body characteristic information is detected, decode the data signal to obtain at least said body characteristic information (**note:** the examiner interprets the claimed "determine the presence of the body characteristic" as when the processing portion decoding the data signal because, inherently, in order to decode the data signal to obtain the body characteristic information, the presence of body characteristic data must be, somehow, detected); and

an output portion operable to output, when the presence of body characteristic information is detected, said body characteristic information (paragraph 3, lines 34-46; "...output to a host computer for processing").

Regarding claim 12, according to column 4 lines 13-17, the processing portion of the interrogator disclosed by Urbas et al. must be able to detect the data formats of the preamble portion, temperature data portion and the identification code portion. The preamble portion and temperature data portion can be considered as two different formats.

Regarding claim 13, the body characteristic disclosed by Urbas et al. is also temperature (column 3, lines 10-11).

Regarding claims 20, 21 and 48, the output portion disclosed by Urbas et al. also includes a connection to a storage medium (column 3, lines 34-36; the "host computer" is a storage medium). Said "host computer" is a device external to said interrogation apparatus.

Regarding claim 27, Urbas et al. also teaches a cyclical transmission of a data telegram, which includes body characteristic information (column 4, lines 6-27).

Regarding claims 29 and 31, Urbas et al. also teaches cyclical transmission of an ID telegram which includes ID information and a body characteristic telegram which includes body characteristic information (column 4, lines 6-27).

Regarding claim 35, Urbas et al. also teaches at least one antenna portion includes at least one send antenna (Figure 1, unit 3) operable to transmit the interrogation signal and at least one receive antenna (Figure 1, unit 12) operable to receive the data signal.

Regarding claim 36, the processing portion disclosed by Urbas et al. also includes a processor (figure 1, unit 16) and a memory (a memory is inherently equipped with in a processor) interconnected to said processor.

Claim 43 is rejected for the same reasons as the rejection of claim 10.

Claim 44 is rejected for the same reasons as the rejection of claim 12.

Regarding claim 54, Urbas et al. also teaches an integrated sensor (figure 2, unit 19) operable to detect said body characteristic information.

Regarding claim 55, the sensor disclosed by Urbas et al. is also operable to detect temperature information (column 4, lines 22-27).

Regarding claim 56, the data signal disclosed by Urbas et al. also includes identification and body characteristic data (column 4, lines 22-27).

Claim 57 is rejected for the same reasons as the rejection of claim 55.

Claim 59 is rejected for the same reasons as the rejection of claim 10.

Regarding claims 63 and 64, Urbas et al. also teaches transmitting an encoded data signal step including determining the characteristic at the transponder; formatting a telegram having a header (column 4, lines 12-27; the "preamble" is a header) and a data portion (the ID data and temperature data can be considered as a data portion), wherein said data portion includes identification information associated with said transponder and said characteristic information.

Regarding claim 65, Urbas et al. also teaches encoding formatting a first telegram having a first data portion, wherein said first data portion includes identification information (column 4, lines 13-28) associated with the transponder.

Claim 73 is rejected for the same reasons as the rejection of claim 20.

Claim 74 is rejected for the same reasons as the rejection of claim 21.

Claims 75, 81 and 84 are rejected for the same reasons as the rejection of claim 10.

Claim 87 is rejected for the same reasons as the rejection of claim 63.

Regarding claim 88, Urbas et al. also teaches determining the body characteristic at the transponder (column 4, lines 13-27; the body characteristic in this case is temperature); formatting a telegram having an indicator (the indicator in this

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case is the ID data) and a data portion, wherein said second data portion includes the body characteristic information.

Claim 94 is rejected for the same reasons as the rejection of claim 20.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 26, 28, 53, 70, 90, 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrender et al. U.S. Patent 6,061,614.

Regarding claims 26, 28, 53, 70 and 90, even though Carrender et al. does not specifically mention that the body characteristic data is included in the trailer, however, one of ordinary skill in the art would recognize that, in a data telegram, the body data has always been positioned in the end. The header or ID portion has always been located in the front of a telegram for identification purpose. Therefore, by conventionality, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide body characteristic data to be included in the trailer of the data telegram disclosed by Carrender et al.

Regarding claim 96, even though Carrender et al. does not specifically mention said interrogator outputs only body characteristic information, however, one of ordinary skill in the art would recognize that the ID data would only be necessary to be outputted

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when only more than one transponders are interrogated so that data from each transponder can be distinguished from each other. However, if only one transponder is interrogated, then the ID data would be not necessarily be outputted or displayed.

7. Claims 16-18, 32, 33, 44-46 and 76-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbas et al. U.S. Patent 6,054,935 in view of Mejia et al. U.S. Patent 5,952,935.

Regarding claims 16, 32 and 44, Urbas et al. teaches the interrogation apparatus of claim 16, except wherein said data format conforms to ISO standard 11785.

Mejia et al., in the same field of endeavor, teaches an interrogation apparatus, wherein data format conforms to ISO standard 11785 (column 10, lines 24-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide ISO standard 11785 data format to the interrogation system disclosed by Urbas et al., as evidenced by Mejia et al., to improve standard system compatibility between data formats and the system platform.

Claim 45 is rejected for the same reasons as the rejection of claim 16.

Regarding claims 17, 18, 33 and 46, Mejia et al. also teaches a transponder/interrogator system, wherein data signals are FDXA/FDXB compatible

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(column 10, lines 5-38). Mejia et al.'s teaching shows the conventionality of using FDXA/FDXB compatible signals in data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide FDXA/FDXB compatible data signals to the interrogator disclosed by Urbas et al., as evidenced by Mejia et al., in order to improve system compatibility.

Claims 76-79 are rejected for the same reasons as the rejections of claims 16-18.

Regarding claim 80, Urbas also teaches identifying a header within said data telegram (column 4, lines 13-27; "preamble" is the header in this case; the "ID data and temperature data" is the data portion in this case); identifying a data portion within said data telegram; and obtaining said identification information from said data portion.

8. Claims 19, 22, 23, 47, 49, 51, 60, 61, 72, 85, 91 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbas et al. U.S. Patent 6,054,935 in view of Shimura U.S. Patent 6,791,457.

Regarding claims 22 and 23, Urbas et al. teaches the interrogation apparatus of claim 22, except an input portion operable to receive an input signal, wherein said processing portion is operable to generate said interrogation signal in response to said input signal.

Shimura, in the same field of endeavor, teaches an interrogation system, which comprises an input portion (Figure 1, unit 270) operable to receive an input signal, wherein said processing portion is operable to generate said interrogation signal in response to said input signal (column 8, lines 57-61), so that the user can manually excite the transponder through the input of the interrogator.

Regarding claims 19 and 47, Urbas et al. teaches the system as claimed in claim 47, **except** wherein the interrogator further includes a display operable to output at least one of said identification information and body characteristic.

Shimura, in the same field of endeavor, teaches an interrogation system, which also includes a display operable to output at least one of said identification information and body characteristic information (Figure 1, unit 250; column 10, lines 38-50)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide displaying the characteristic information on the display of the interrogator disclosed by Urbas et al., as evidenced by Shimura, so that the user can view said data.

Claims 49, 51, 60, 61 and 85 are rejected for the same reasons as the rejection of claim 22.

Claims 72, 91 and 92 are rejected for the same reasons as the rejection of claim 19. The display disclosed by Shimura is indeed functionally "associated" with the transponder.

Note: Neither the specification nor the drawing of this application indicates a display located on the transponder.

9. Claims 24, 50 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbas et al. U.S. Patent 6,054,935 in view of Shimura U.S. Patent 6,791,457 and in further view of Griffith et al. U.S. Patent 5,887,176.

Regarding claims 24, 50 and 62, Urbas et al. in view of Shimura teaches the interrogation apparatus of claim 24, **except** wherein the input portion of the interrogator includes a connection to an external device which provides a signal to generate said interrogation signal.

Griffith et al., in the same field of endeavor, teaches an interrogation system, wherein the input portion of the interrogator includes a connection to an external device (Figure 1, "system controller" is the external device) which provides a signal to generate the interrogation signal (column 4, lines 43-58), so that the user can remotely operate said interrogator.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an external device being connected to the input of the interrogator disclosed by Urbas et al. in view of Shimura, as evidenced by Griffith et al., so that the user can remotely control said interrogator from an external device.

10. Claims 37, 86 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbas et al. U.S. Patent 6,054,935 in view of Griffith et al. U.S. Patent 5,887,176.

Regarding claim 86, Urbas et al. teaches the interrogation apparatus of claim 86, **except** wherein the input signal is generated in response to a signal received at the interrogator from an external controller.

Griffith et al., in the same field of endeavor, teaches an interrogation system, wherein the input portion of the interrogator includes a connection to an external device (Figure 1, "system controller" is the external device) which provides a signal to generate the interrogation signal (column 4, lines 43-58), so that the user can remotely operate said interrogator.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an external device being connected to the input of the interrogator disclosed by Urbas et al., as evidenced by Griffith et al., so that the user can remotely control said interrogator from an external device.

Regarding claim 37, Urbas et al. teaches the interrogation apparatus of claim 37, **except** wherein the memory is operable to store information for multiple transponders.

Griffith et al., in the same field of endeavor, teaches an interrogator apparatus, wherein the memory is operable to store information for multiple transponders (Figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a memory to the interrogator disclosed by Urbas et al., as evidenced by Griffith et al., operable to store information for multiple transponders.

Regarding claim 93, Urbas et al. teaches the method of claim 93, **except** displaying the body characteristic information; comparing a value of said body characteristic information to a predetermined range of values; and generating an alarm when said value is not within said predetermined range of values.

Griffith et al., in the same field of endeavor, teaches an interrogation method, which also includes displaying the characteristic information and generating an alarm. Even though, Griffith does not specifically mention comparing a value of said characteristic information to a predetermined range of values, however, one of ordinary skill in the art would recognize that an alarm has been conventionally generated based on a comparison with a predetermined range of values. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide generating an alarm when a value is not within a predetermined range of values, to the method disclosed by Urbas et al., as evidenced by Griffith et al., so that an alarm can be generated when a predetermined condition exceeded.

11. Claims 30, 34 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbas et al. U.S. Patent 6,054,935.

Regarding claim 30, even though Urbas et al. does not specifically teach that said cyclical transmission includes three identification telegrams, however, one of ordinary skill in the art would recognize that if the cyclical transmission is repeated three times to increase the chance of signal reception, then said cyclical transmission would include three identification telegrams. Therefore, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to provide three ID telegram to the cyclical transmission disclosed by Urbas et al. so that said cyclical transmission can be repeated three times.

Regarding claim 34, even though Urbas et al. does not teach one antenna portion including a single antenna operable to transmit the interrogation and receive the data signal, however, the examiner takes official notice that single antennas have been conventionally equipped for transmitting and receiving signals. Therefore, by conventionality, it would have been obvious to one of ordinary skill in the art to provide a single antenna for transmitting and receiving signal to the interrogator disclosed by Urbas et al.

Regarding claim 58, even though Urbas et al. does not specifically mention said interrogator outputs only body characteristic information, however, one of ordinary skill in the art would recognize that the ID data would only be necessary to be outputted when only more than one transponders are interrogated so that data from each transponder can be distinguished from each other. However, if only one transponder is interrogated, then the ID data would be not necessarily be outputted or displayed.

12. Claim 97 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carrender et al. U.S. Patent 6,061,614 in view of Breed et al. US. Pub 2002/0095980.

Regarding claim 97, Carrender et al. teaches the (vehicle performance) interrogation apparatus of claim 95, **except** wherein the body characteristic is temperature.

Breed et al. also teaches an interrogation apparatus for monitoring the condition of vehicle's tires, wherein said condition being temperature (paragraph [0075] and [0076]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide monitoring temperature to the interrogation apparatus of Carrender et al., as evidenced by Breed et al., so that tires condition can be monitored.

Allowable Subject Matter

13. Claims 41, 42, 83 and 98-102 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 41, the prior arts of record fail to teach or disclose the interrogation apparatus of claim 39, wherein said information signal contains a plurality of indicators, and said processing portion is operable to determine the presence of body characteristic information based on any detected differences between one or more of the plurality of indicators.

Regarding claim 83, the prior arts of record fail to teach or disclose the method for interrogating a transponder as claimed in claim 81, which further includes

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determining the presence of body characteristic information by comparing headers from a plurality of data telegrams; and determining the presence or absence of body characteristic information within said telegrams based on differences detected between said headers.

Regarding claim 98, the prior arts of record fail to teach or disclose the interrogation apparatus of claim 95, wherein the processing portion is operable to detect at least two different formats of data within said data signal and is operable to detect the presence or absence of body characteristic information within each format of data.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571) 272-3069. The examiner can normally be reached on 9:30AM-6PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Q Dang
5/22/2007
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